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Remarks

In the outstanding Official Action, the Examiner:

(1) indicated that the claimed subject matter of the above-identified patent application is not supported totally in the parent patent applications and that the filing date of all of the claims of the above-identified patent application is November 17, 2000;

(2) rejected claims 1-14 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention;

(3) rejected claims 1, 5-7 and 11-14 under 35 USC 102(e) as being anticipated by Reisser et al. or, in the alternative, under 35 USC 103(a) as obvious over Reisser et al. in view of Ross et al.;

(4) rejected claims 15, 19 and 20 under 35 USC 103(a) as being unpatentable over Beck, Jr. et al. in view of Mahony, III;

(5) objected to claims 16-18 as being dependent upon a rejected base claim and indicated that claims 16-18 would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims; and

(6) indicated that claims 2-4 and 8-10 would be allowable if rewritten to overcome the rejection under 35 USC 112, second paragraph, as set forth above and to include all of the limitations of the base claim and any intervening claims.

In response to Item 1 above, Applicants acknowledge that the filing date of all of the claims of the claims of the above-identified patent application is November 17, 2000.

In response to Item 2 above, Applicants have now amended claims 1, 7 and 13 so as to more clearly claim the subject matter of the present invention.

Independent claims 1, 7 and 13 have each been amended to call for a fixation screw in which the planar end surface is formed so that the outer periphery of the shank is concentric with a maximum outer diameter of the screw threads. Accordingly, independent claims 1, 7 and 13 are believed to be in condition for allowance, and allowance thereof is respectfully requested.

Claims 2-6, 8-12 and 14, which depend either directly or ultimately from independent claims 1, 7 and 13, respectively, are believed to be in condition for allowance for at least the above-identified reasons. Accordingly, allowance of dependent claims 2-6, 8-12 and 14 is respectfully requested.

In response to Item 3 above, Applicants respectfully traverse the rejection of claims 1, 5-7, and 11-14 under either 35 USC 102(e) as being anticipated by Reisser et al. or 35 USC 103(a) as being obvious over Reisser et al. in view of Ross et al.

Independent claim 1, as currently amended, comprises a fixation screw for fastening a graft ligament in a bone tunnel, wherein the proximal end defines a generally planar end surface disposed transversely to the central axis and at an angle thereto other than a normal angle, and the planar end

surface is formed so that the outer periphery of the shank is concentric with a maximum outer diameter of the screw threads. Independent claims 7 and 13, as currently amended, each comprise a fixation screw comprising an elongated shank having the proximal end comprising a generally planar end surface disposed transversely to the axis and at an angle thereto other than a normal angle, and the planar end surface is formed so that the outer periphery of the shank is concentric with a maximum outer diameter of the screw threads.

Riesser et al. is believed to disclose an interference screw having an angled profile across only a portion of the proximal end thereof so as to create an end surface having an overall shape which does not provide an outer periphery concentric with a maximum outer diameter of the screw threads (see Figs. 3, 4 and 7 of Riesser et al.) More specifically, and looking at Fig. 3 of Riesser et al., Applicants believe that the proximal end of the Reisser screw forms at least one substantial discontinuity adjacent to reference numeral 26 so as to create a non-concentric periphery. This profile is believed to be consistent with the end surfaces shown in Figs. 4 and 7 of Riesser et al. As such, Reisser et al. is believed to teach away from the construction of the present invention in which the generally planar end surface has an outer periphery concentric with a maximum outer diameter of the screw threads. In this respect, Applicants note that their generally planar end surface provides a substantial advantage over the prior art, since it allows the end

surface of the screw to form a substantially flush, void-free fit at the outer periphery of the shank with the outer surface of the bone.

Applicants believe that Ross et al. disclose an interference bone fixation screw with a proximal end disposed at a normal angle to its central axis.

Applicants do not believe that Ross et al. disclose a fixation screw in which a planar end surface is disposed transversely to a central axis and is formed so that the outer periphery of the shank is concentric with a maximum outer diameter of the screw threads.

Accordingly, independent claims 1, 7 and 13 are believed to be in condition for allowance, and allowance thereof is respectfully requested.

Claims 2, 5 and 6, 11 and 12, and 14, which depend either directly or ultimately from independent claims 1, 7 and 13, respectively, are believed to be allowable at least for the above-identified reasons.

Accordingly, allowance of claims 2, 5, 6, 11, 12 and 14 is respectfully requested.

In response to Item 4 above, Applicants respectfully traverse the rejection of claims 15, 19 and 20 under 35 USC 103(a) as being unpatentable over Beck, Jr. et al. in view of Mahony, III.

Independent claim 15 comprises a graft ligament anchor assembly comprising a fixation screw comprising an elongated shank having screw threads disposed on the shank and extending from the distal end portion to the proximal end, and having a proximal end comprising a generally planar end surface disposed at an angle for positioning as generally a continuation of surrounding

bone surface of a body in which a graft ligament is fastened.

Applicants believe that Beck, Jr. et al. disclose an anchoring device having a threaded insertion member with a proximal end disposed at a normal angle.

Applicants believe that Mahony, III discloses a fixation screw having a soft material configured to be placed in a bone tunnel and then trimmed. The screw threads on the shank of Mahony, III do not appear to extend from the distal end portion to the proximal end.

Applicants believe that neither Beck, Jr. et al. nor Mahony, III disclose a fixation screw comprising an elongated shank having screw threads extending from a distal end portion to a proximal end, and having a proximal end comprising a generally planar end surface disposed at an angle for positioning as generally a continuation of surrounding bone surface of a body in which a graft ligament is fastened.

Accordingly, independent claim 15 is believed to be in condition for allowance, and allowance thereof is respectfully requested.

Claims 19 and 20, which directly depend from independent claim 15, are believed to be in condition for allowance for at least the above-identified reasons. Accordingly, allowance of claims 19 and 20 is respectfully requested.

In response to Item 5 above, Applicants have now added new claims 26-28, which are written in independent form, and include the limitations of claims 16-18, respectively, the base claim and any intervening

claims. Accordingly, new claims 26-28 are believed to be in condition for allowance.

In response to Item 6 above, Applicants have now added new claims 29-34 which are written in independent form and include the limitations of claims 2-4 and 8-10, respectively, the base claim and any intervening claims. Accordingly, new claims 29-34 are believed to be in condition for allowance.

In event that any additionally fees may be required in this matter, please charge the same to Deposit Account No. 16-0221.

Respectfully submitted,

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